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AUTHOR Quan, Howard; And Others
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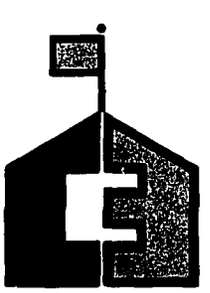
ABSTRACT

An analysis of the statewide evaluation reports of the Elementary and Secondary Education Act of 1965, Title I, program in California for 1971-72 indicated general findings regarding each of several components: Title I students at all grade levels, on an average, attained more than one month's growth in reading skills for each month of instruction. Districts that offered English as a second language reported that their objectives were achieved more often when locally developed instructional materials were used with individualized instruction rather than when available commercial instructional materials were used in large-group instruction. A majority of Title I students achieved gains equal to, or more than, one month's growth in mathematics for each month's participation in the Title I program. The auxiliary services component provided supportive pupil personnel services, library services, and health services necessary to the success of the project participants. Major objectives included improvement in pupil behavior, learning, and personal health. Improved parent attendance at school meetings and parent conferences, more positive attitudes towards the school, and increased communication and cooperation between the home and the school were objectives achieved. Greater understanding and acceptance, knowledge, interaction, and positive attitudes helped to reduce isolation between different racial, social, cultural, or ethnic groups. Staff personnel were trained who worked directly with the students. Emphasis was on improvement of instruction, changes in staff attitudes, and increased knowledge of learning processes. (Author/JM)

Evaluation of ESEA, TITLE I Projects of California Schools

Annual Report, 1971-72



CALIFORNIA STATE DEPARTMENT OF EDUCATION
Wilson Riles -- Superintendent of Public Instruction
Sacramento • 1973

Evaluation of ESEA, TITLE I Projects of California Schools

Annual Report, 1971-72

Prepared by the

BUREAU OF COMPENSATORY EDUCATION
EVALUATION AND RESEARCH
Division of Compensatory Education

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Foreword

When I took the oath of office as your Superintendent of Public Instruction, I pledged my energies and the power of this office to improve the quality of education in our state. I intend to keep that pledge.

I told those assembled at the inaugural that I would be guided by these precepts:

- Men are to be served by institutions, not governed by them, and so the facilities at my command here will be to serve the parents and children of California, not dictate to them.
- The road to individual fulfillment is education, and we must ensure that it is a road broad enough for all; and in doing this, we must stress the workable and the positive.

In the compensatory education program, we have proved that we can meet the special educational needs of children from low-income and poverty backgrounds.

When we expanded California's pilot compensatory education program in 1965, we committed ourselves to a new definition of equal educational opportunity. We recognized that equal educational opportunity meant an educational program geared to the needs of each child—a program that would give each child an equal chance to succeed to the maximum extent of his potential regardless of his economic, ethnic, social, or cultural background. Teachers and school administrators recognized that they had to compensate for the disadvantaged backgrounds of some children who had educational needs that could not be met in the regular instructional program.

We have found that the best results of compensatory education efforts have occurred in medium-sized urban areas and in suburban areas. Additionally, we have had the best results with pupils in the elementary schools. This is consistent with what educators have always believed to be true: We must reach disadvantaged children—in fact, all children—at an early age before frustration and failure become a way of life for them. We are talking about the difference between prevention and remediation—between building and repairing.

We know that the appropriateness, adequacy, and quality of our compensatory education programs will be determined by the progress children make in such programs. Therefore, it is highly

important that pupil progress be evaluated regularly, for information regarding such progress identifies the strengths and weaknesses of our programs.

This report of the evaluation of the Elementary and Secondary Education Act, Title I, projects conducted in California schools in 1971-72 contains data we may use of applying project strengths more broadly and for correcting and avoiding the weaknesses identified. To improve our educational program, we must make evaluation an ongoing activity; we must utilize the results of such evaluations. We must stress the workable and the positive, and to do so we must KNOW what they are.

Superintendent of Public Instruction

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Preface

According to the provisions of the federal Elementary and Secondary Education Act, Title I, and California's McAteer Act of 1965, an evaluation of the California compensatory education program is required annually. The Division of Compensatory Education, California State Department of Education, has responsibility for evaluating and disseminating information to school districts and other interested parties on the results of activities designed to strengthen the educational program for children from disadvantaged backgrounds.

California's ESEA, Title I, program was initiated in the spring of 1966. This report contains an evaluation of the program as conducted during the 1971-72 school year. Most of the Title I activities were operated by school districts for disadvantaged children regularly enrolled in school. Specialized programs were also conducted for children of migrant agricultural workers, handicapped children in state schools and hospitals, and neglected and delinquent children in state and local institutions. The evaluation of compensatory education programs operated by state institutions for neglected and delinquent youth and for children residing in state mental hygiene facilities and residence schools are included in a separate report.

Major responsibility for the preparation of the state report was assumed by Howard Quan, Hubert Reeves, Malcolm Richland, Milton P. Wilson, and Daniel Zuckerman, all of the Bureau of Compensatory Education Evaluation and Research, State Department of Education.

MANUEL V. CEJA
Acting Chief, Division of Compensatory Education

ALEXANDER I. LAW
Chief, Office of Program Evaluation

J. VINCENT MADDEN
Assistant Chief, Office of Program Evaluation

Summary of the ESEA, Title I, Program in California, 1971-72

An analysis of the statewide evaluation reports of the Elementary and Secondary Education Act of 1965 (ESEA), Title I, program in California for 1971-72 indicated general findings regarding each of several components:

- *Language development.* Title I students at all grade levels, on an average, attained more than one month's growth in reading skills for each month of instruction. Districts that offered English as a second language (ESL) reported that their objectives were achieved more often when locally developed instructional materials were used with individualized instruction rather than when available commercial instructional materials were used in large-group instruction.
- *Mathematics.* A majority of Title I students achieved gains equal to, or more than, one month's growth in mathematics for each month's participation in the Title I program. Successful projects frequently used individualized methods, diagnostic and prescriptive procedures, and motivation- and content-oriented materials.
- *Auxiliary services.* This component provided supportive pupil personnel services, library services, and health services necessary to the success of the project participants. Major objectives included improvement in pupil behavior, learning, and personal health.
- *Parent involvement.* Improved attendance at school meetings and parent conferences, more positive attitudes towards the school, and increased communication and cooperation between the home and the school were objectives achieved.
- *Intergroup relations.* Greater understanding and acceptance, knowledge, interaction, and positive attitudes helped to reduce isolation between different racial, social, cultural, or ethnic groups.
- *Staff development.* Staff personnel were trained who worked directly with the students. Emphasis was on improvement of instruction, changes in staff attitudes, and increased knowledge of learning processes.

A General Look at ESEA, Title I in California, 1971-72

Title I of the Elementary and Secondary Education Act of 1965 (ESEA) is aimed at ensuring that every child will receive an equal opportunity to succeed educationally to the full extent of his potential regardless of his economic, social, or cultural background.

The child eligible for Title I programs generally does not come to school as prepared for successful learning as do his classmates. He may lack experience, verbal skills, or educational values common to children of his age group. Poor health and inadequate nutrition may also interfere with his ability to participate and succeed in school.

School districts participating in the 1971-72 Title I program were required to serve those students most in need. Target schools in the program were identified from school districts in areas with the highest incidence of poverty. Students selected for participation were those who evidenced an academic achievement rate of 0.7 year's growth or less for each year in school. During 1971-72 Title I served 314,281 students in California, or approximately 40 percent of the eligible children in the state.

Title I projects implemented by school districts in 1971-72 included the following features:

- An expenditure of at least $300 per child
- Inclusion of six components: language development, mathematics, auxiliary services, parent involvement, intergroup relations, and staff development
- A statement of performance objectives for each of the six components
- Special consideration of pupils in the elementary school grades
- Use of diagnostic-prescriptive techniques in the language development component

School districts with Title I entitlements of less than $25,000 were required to join with other small districts in comprehensive compensatory education projects, which were to be implemented coopera-

tively. During 1971-72 a total of 560 school districts participated in 84 cooperative projects.

Funding for Title I Projects

In the 1971-72 fiscal year, $120,909,695 in Title I funds were made available to California school districts. Additional Title I funds were made available for specialized projects: $1,114,636 for neglected and delinquent youths in local institutions; $8,285,802 for children of migrant agricultural workers; $1,477,145 for handicapped children in state schools operated by the State Department of Education and state hospitals operated by the State Department of Mental Hygiene; and $1,847,592 for delinquent youths in California Youth Authority institutions. The total funding for these specialized projects increased California's Title I allocation to $133,635,170.

This evaluation report is based upon the Title I funds expended and encumbered by school districts as of June 30, 1972. It does not include data from the 1972 summer school projects or any funds carried over into the 1972-73 school year.

Participants in the Title I Program

In 1971-72 school districts reported that 314,281 students from preschool through high school grades participated in Title I activities. Of the total number of students served, 96.7 percent were enrolled in the public schools. The number of Title I participants in 1971-72 was nearly 22 percent higher than in 1970-71, reflecting the increased funding available to school districts.

Enrollment statistics are presented in tables 1 and 2. Table 1 is a distribution, by grade level, of students enrolled in public and nonpublic schools participating in Title I activities during 1971-72. Table 2 presents a percentage breakdown, by grade level, of California students who received Title I services from 1967-68 through 1971-72.

Personnel Involved in Title I Projects

To implement their Title I projects in 1971-72, school districts increased their staffs by 23,775 persons from those normally provided by school district funds. The number and types of personnel whose salaries and other costs were paid for with Title I funds during 1971-72 are shown in Table 3. Teacher aides comprised the largest category of personnel; 9,915 aides were employed on a full- or part-time basis. Over 4,800 persons volunteered their services to Title I programs.

TABLE 1

Number of Students Enrolled in ESEA, Title I, Projects in Public and Nonpublic Schools in California, by Grade Level 1971-72

Grade level	Number of students enrolled			Percent of students	
	Public schools	Nonpublic schools	Total	Public schools	Nonpublic schools
Preschool	4,067	0	4,067	100.0	0
Kindergarten	35,278	17	35,295	99.9	0.1
One	41,416	1,012	42,428	97.6	2.4
Two	42,081	1,813	43,894	95.9	4.1
Three	39,680	1,842	41,522	95.6	4.4
Four	38,157	1,810	39,967	95.5	4.5
Five	35,013	1,370	36,383	96.2	3.8
Six	31,508	1,078	32,586	96.7	3.3
Seven	7,491	426	7,917	94.6	5.4
Eight	5,986	374	6,360	94.1	5.9
Nine	11,377	72	11,449	99.4	0.6
Ten	6,124	31	6,155	99.5	0.5
Eleven	2,884	13	2,897	99.6	0.4
Twelve	1,223	22	1,245	98.2	1.8
Ungraded	1,575	541	2,116	74.4	25.6
Total	303,860	10,421	314,281	96.7	3.3

TABLE 2

Percent of Students Receiving ESEA, Title I, Services in California by Grade Level Groups, 1967-68 Through 1971-72

Grade level	Percent of total Title I enrollment				
	1967-68	1968-69	1969-70	1970-71	1971-72
Kindergarten through grade three	40.4	41.8	50.4	52.1	51.9
Grades four through six	22.8	23.7	33.0	33.9	34.7
Grades seven through nine	19.9	20.7	8.9	9.1	8.2
Grades ten through twelve	12.4	10.9	4.0	3.6	3.3

NOTE: Figures for participants in preschool and ungraded programs are not included in this table; therefore, the percent figures in each column do not add up to 100.

TABLE 3

Number of Positions Supported by ESEA, Title I, Funds in California 1971-72

Position	Number of positions, by time employed		
	Full-time	Half-time or more	Less than half-time
Teaching			
Preschool	188	48	23
Kindergarten	13	6	16
Elementary	887	95	189
Secondary	214	72	232
Reading specialist	965	203	100
ESL specialist	194	40	13
Mathematics specialist	383	131	104
Subtotal	2,844	595	677
Nonteaching			
Instructional teacher aide	2,741	5,718	1,456
Community aide	283	105	133
Librarian	59	33	30
Director	50	62	100
Supervisor/coordinator	106	55	123
Counselor	197	49	84
Psychologist	38	49	116
Psychometrist	7	2	16
Evaluator	34	16	93
Social worker	26	9	6
Attendance counselor	44	5	4
Nurse	78	55	118
Clerk/secretary	579	194	199
Adult tutors	67	133	95
Student tutors	63	97	404
Volunteers	995	354	3,498
Other	354	176	351
Subtotal	5,721	7,112	6,826
Total	8,565	7,707	7,503

Advisory Committees

During 1971-72 each Title I project was required to establish a two-level advisory structure—a school district advisory committee and a parent advisory group at each participating public school. The purpose of the advisory committee was to assist and advise the district in planning, evaluating, and improving educational services provided through Title I. The involvement of parents of Title I participants and of other members of the community was an additional advantage to the advisory structure.

The number of participants serving on district advisory committees and parent advisory groups for 1969-70, 1970-71, and 1971-72 is presented in Table 4. While the number of committee members increased only 4 percent in three years, members residing in the target area increased 10 percent, and the number of parents of Title I participants serving on advisory committees increased 27 percent. During the same period the number of target school parent advisory groups increased by 15 percent, but the number of parents of participating children increased by 73 percent.

Analyses of ESEA, Title I, Program Data

Results of the language development and mathematics components were analyzed by the Bureau of Compensatory Education Evaluation and Research through gains by grade level and by comparisons between *actual* and *anticipated* achievement. In addition, the bureau categorized student achievement gains as follows:

- *Substantial improvement.* Gains were equal to, or greater than, 1.5 years for the school year or 1.5 months per month of instruction.
- *Moderate improvement.* Gains were equal to, or greater than, one year for the school year or one month per month of instruction.

TABLE 4

Participants in ESEA, Title I, Advisory Committees in California 1969-70 Through 1971-72

Group	Number of participants		
	1969-70	1970-71	1971-72
District advisory committee members	7,445	7,701	7,716
District advisory committee members residing in eligible attendance areas	5,839	6,033	6,397
Parents serving on district advisory committees	3,912	4,316	4,976
Parent advisory groups at schools	1,372	1,486	1,572
Parents of participating children serving on advisory groups at schools	7,329	8,800	12,703

- *Little or no improvement.* Gains were less than one year during the school year or less than one month per month of instruction.
- *Undetermined improvement.* Reports submitted by school districts were inadequate for any determination of academic gain by students because of incomplete information, inappropriate measurement instruments, contradictory data, or general statements of success without supporting documentation.

Results of supportive components of auxiliary services, parent involvement, intergroup relations, and staff development were assessed but could not be categorized as were the results of the instructional components because of the differences in objectives and activities developed at the local school level.

A summary of the required components is described in the sections that follow. An expanded analysis of the components is presented in subsequent chapters.

Summary of Language Development Component

The basic objective of the language development component was to improve reading and oral language skills of Title I students through reading instruction or English language instruction for students with a limited understanding of English (ESL). Districts reported an increased use of the diagnostic-prescriptive approach to individualizing instruction.

A total of 279,632 students participated in reading instruction activities, and 17,501 students participated in ESL activities of the language development component.

Local educational agencies expended or encumbered $46 million for reading activities and $3.5 million for ESL activities. Funds were used to hire additional personnel and to purchase materials to develop a more concentrated language program. Additional funding from other categorical aid funds amounted to expenditures of approximately $217 per student for reading instruction and $229 per student for ESL instruction. This represents a decrease from 1970-71 of approximately 9.6 percent in money expended per pupil for reading and a 7.5 percent increase for ESL per-pupil expenditure during 1971-72.

Summary of Mathematics Component

The 1971-72 school year was the third year that school districts were required to include mathematics as part of the total Title I program. The mathematics component was designed to improve

participants' understanding of concepts and skills. Mathematics specialists worked with instructional aides and classroom teachers in the use of manipulative materials, puzzles, and games in an attempt to develop mathematical concepts.

A total of 269,997 students participated in the mathematics component at an estimated cost of $127 per participant. This expenditure per participant was 9.3 percent less in 1971-72 than in the 1970-71 school year.

Local educational agencies expended or encumbered over $28.7 million for the mathematics component. An additional $5.6 million was expended or encumbered from other categorical aid funds.

Summary of Auxiliary Services Component

Auxiliary services were provided to the project participants to support instructional activities; they consisted of pupil personnel services, library services, and health services.

Counseling and testing were the types of pupil personnel services most frequently provided to Title I participants. Library services included materials and personnel either to augment existing programs or to initiate programs. Health services activities included medical, dental, and nutritional assistance to participants.

The auxiliary services component provided 186,629 participants with pupil personnel services; 206,404, with library services; and 217,290, with health services. The total amount of 1971-72 Title I monies expended or encumbered for auxiliary services to 610,323 participants was $10 million. In the 1970-71 fiscal year, $5.2 million of Title I funds was spent to provide auxiliary services to 417,865 students.

Summary of Parent Involvement Component

Parent involvement activities were designed by school districts; they included service, educational, and group and individual participation. Districts reported that 174,406 parents and 34,114 school personnel participated in parent involvement activities. During 1971-72 the amount of Title I funds spent for parent involvement activities was approximately $3.5 million, a decrease of $700,000 from 1970-71.

Summary of Intergroup Relations Component

The intergroup relations component was designed in each school district to alleviate the racial, social, or linguistic isolation of students. Programs were developed to inform the students about other people through social, recreational, and instructional activities

both in and out of the classroom. A total of 367,661 persons participated in intergroup relations activities. During 1971-72 school districts spent over $2.5 million of Title I funds for the intergroup relations activities, a decrease of $300,000 from the 1970-71 expenditures.

Summary of Staff Development Component

School districts operating compensatory education programs in California were required to maintain an ongoing staff development program for all personnel involved with Title I students. Programs and meetings were conducted for teachers, aides, and specialists to help them improve the education of Title I students.

Of the 38,779 persons receiving staff development training, 47 percent were classroom teachers. In 1971-72 school districts expended or encumbered more than $4.3 million for staff development, compared to $5.3 million encumbered during 1970-71. The Title I expenditures for 1971-72 amounted to $3.8 million, or 87 percent of the total cost.

Language Development Component

The language development component was one of the required instructional components funded under ESEA, Title I. It consisted of the improvement of reading skills for academically low-achieving English-speaking children and instruction in English as a second language for children with a limited facility in the English language.

Language Development Through Reading Instruction

A total of 279,632 public school students participated in reading instruction activities. Of these students, 248,868, or 89 percent, were in kindergarten and grades one through six; and 30,764, or 11 percent, were in grades seven through twelve (see Table 5).

Reading instruction received major emphasis in the language development component during 1971-72, with students in all 1,761 target schools participating in reading activities. Of all Title I funds encumbered, 47 percent were encumbered for activities in reading instruction. When ESEA, Title I, funds were combined with state and local monies, an average of $217 per pupil was expended for reading instruction (see Table 6).

Objectives and Activities in Reading Instruction

More than 95 percent of all ESEA, Title I, projects in 1971-72 included statements of measurable objectives regarding growth in reading skills for target students. Objectives were most frequently stated in terms of months of growth per month of instruction as measured by standardized tests.

Individualized and group-type instructional approaches for the teaching of reading were widely reported. Both of these organizational techniques included use of diagnostic-prescriptive methods; personal contacts with reading specialists, teachers, aides, and tutors; and available commercial and locally developed programmed materials.

Diagnostic-prescriptive methods were used by teachers to achieve precision in educational planning for Title I students. Teachers diagnosed low-achieving pupils by using a variety of norm- and criterion-referenced measures designed to sample fundamental skills

requisite for at least average performance. This test information afforded classroom teachers and reading specialists comparative bases for generating prescriptive materials and activities and for determining student gains over specified time periods.

TABLE 5

Number of Public School Student Participants in ESEA, Title I Reading Instruction Activities in California by Grade Level, 1971-72

Grade level	Number of students enrolled	Percent of students
Kindergarten	33,471	12.0
One	39,361	14.1
Two	39,715	14.2
Three	37,522	13.4
Four	35,852	12.8
Five	32,923	11.8
Six	30,024	10.8
Seven	6,809	2.4
Eight	5,576	2.0
Nine	9,857	3.5
Ten	5,362	1.9
Eleven	2,285	0.8
Twelve	875	0.3
Total	279,632	100.0

TABLE 6

Expenditures for Activities in Reading Instruction in ESEA Title I, Projects in California, by Funding Source 1971-72

Funding source	Expenditure	Percent of total
Federal		
ESEA, Title I	$45,938,805	75.7
State		
Miller-Unruh Basic Reading Act	4,958,882	8.2
Special Teacher Employment Program	2,989,291	4.9
Local		
District supplementary funds	4,076,224	6.7
Other	2,727,206	4.5
Total	$60,690,408	100.0
Expenditure per student	$217	

Personal teaching contact with reading specialists was provided by means of individualized and small-group experiences to students who had special instructional needs. Contacts were augmented through use of instructional aides and tutorial programs. Roles and responsibilities of aides varied from one school to another, but their primary purpose was to provide instructional support. Tutors included older children serving younger children (cross-age tutoring), high school and college students, and parents and other community members.

Available commercial and locally developed programmed materials augmented regular classroom instruction. These materials frequently were accompanied by criterion-referenced performance tests of student progress that could be administered and evaluated by teachers and aides in the classrooms.

Project personnel experimented with a variety of motivational techniques involving audiovisual equipment and materials, group counseling, field trips, library activities, selective reading programs, group activities, and word games. However, reading content continued to receive primary attention, with particular emphasis placed on fundamental skills.

Evaluation of Reading Instruction

Analysis of student progress was obtained through pretest and post-test comparisons of standardized achievement tests. School districts relied heavily upon the California state mandated testing program in grades one, two, three, and six, with complementary measures in kindergarten and grades four and five. The districts used standardized and nonstandardized measures for determining growth in reading skills. Projects were also reviewed in terms of the relationship between program objectives, activities, and outcomes.

Using standardized measures on a pretest and post-test schedule, project personnel computed average months of gain in reading skill per month of instruction for students in grades one through twelve in public schools and in grades one through eight in nonpublic schools. The findings for public and nonpublic schools are presented in tables 7 and 8, respectively.

Results of Reading Instruction

Results revealed that gain scores for public and nonpublic school students, by grade level, were similar. With seven months between pretesting and post-testing, Title I students at all grade levels attained more than one month's average growth in reading skills for each month of instruction.

TABLE 7

Average Reading Achievement by Public School Students Participating in ESEA, Title I, Projects in California by Grade Level, 1971-72

Grade level	Number of students tested	Average grade equivalent scores		Average months of gain between pretest and post-test
		Pretest	Post-test	
One	12,242	1.0	1.7	7
Two	32,898	1.5	2.3	8
Three	31,326	2.1	3.0	9
Four	27,652	2.8	3.6	8
Five	26,042	3.4	4.2	8
Six	24,339	4.0	4.8	8
Seven	4,921	4.4	5.2	8
Eight	4,041	4.9	5.8	9
Nine	6,498	5.6	6.8	12
Ten	3,013	6.1	7.2	11
Eleven	1,376	6.7	7.9	12
Twelve	477	6.7	8.0	13

TABLE 8

Average Reading Achievement by Nonpublic School Pupils Participating in ESEA, Title I, Projects in California by Grade Level, 1971-72

Grade level	Number of pupils tested	Average grade equivalent scores		Average months of gain between pretest and post-test
		Pretest	Post-test	
One	308	1.0	1.9	9
Two	1,253	1.6	2.4	8
Three	1,289	2.3	3.2	9
Four	1,130	3.0	3.9	9
Five	895	3.8	4.7	9
Six	668	4.6	5.5	9
Seven	274	5.2	6.2	10
Eight	263	6.5	7.3	8

Further analysis based upon years of growth showed that 64 percent of the public school students and 70 percent of the nonpublic school students achieved moderate (0.7 to 1.4 years) to substantial (1.5 years or more) growth in reading during seven months of instruction between the pretest and post-test. Percents of student gains as determined by pretest and post-test data are presented in tables 9 and 10.

TABLE 9

Reading Achievement Gains by Public School Students Participating in ESEA, Title I, Projects in California, by Grade Level 1971-72

Grade level	Number of students tested	Percent of students tested			
		Substantial gain (1.5+ years)	Moderate gain		Little or no gain (0.6 year or less)
			1.0-1.4 years	0.7-0.9 year	
One	12,242	1.6	13.4	37.6	47.4
Two	32,898	6.6	25.2	27.2	41.0
Three	31,326	6.6	32.7	30.6	30.1
Four.....	27,652	8.6	24.5	28.9	38.0
Five	26,042	5.6	20.1	32.2	42.1
Six	24,339	6.2	23.7	37.6	32.5
Seven	4,921	15.2	13.5	21.9	49.4
Eight	4,041	12.1	13.4	71.6	2.9
Nine	6,498	28.9	39.2	18.8	13.1
Ten	3,013	24.1	32.0	15.4	28.5
Eleven ...	1,376	21.3	32.3	17.3	29.1
Twelve ...	477	40.5	23.0	16.8	19.7
Total or average	174,825	8.1	24.7	31.2	36.0
			55.9		

TABLE 10

Reading Achievement Gains by Nonpublic School Pupils Participating in ESEA, Title I, Projects in California, by Grade Level 1971-72

Grade level	Number of pupils tested	Percent of pupils tested			
		Substantial gain (1.5+ years)	Moderate gain		Little or no gain (0.6 year or less)
			1.0-1.4 years	0.7-0.9 year	
One	308	3.9	21.4	30.9	43.8
Two	1,253	8.3	21.1	20.9	49.7
Three	1,289	7.6	16.9	59.4	16.1
Four.....	1,130	11.9	15.0	42.3	30.8
Five	895	14.9	18.2	50.9	16.0
Six	668	11.7	45.5	9.6	33.2
Seven	274	9.5	61.3	4.4	24.8
Eight	263	3.0	25.5	45.6	25.9
Total or average	6,080	9.8	23.4	37.0	29.8
			60.4		

A summary of reading achievement test data during the school years 1967-68 through 1971-72 is presented in Table 11.

TABLE 11

Reading Achievement Gains by Public School Students Participating in ESEA, Title I, Projects in California 1967-68 Through 1971-72

Level of achievement	Percent of students tested				
	1967-68	1968-69	1969-70	1970-71	1971-72
Substantial improvement	9.6	14.1	8.6	6.1	7.2
Moderate improvement	35.8	50.1	52.4	47.8	49.8
Little or no improvement	42.8	26.5	30.1	34.4	31.9
Incomplete data	11.8	9.3	8.9	11.7	11.1

Test information contained incomplete data which could not be aggregated with statewide results because of procedural irregularities. The information in this category included instances in which either pretest or post-test information was omitted, test results were not given in grade equivalents, test results were combined among several grade levels, the standardized measure used in the pretest differed from the standardized measure used in the post-test, nonstandardized tests were used in reporting student progress, or no test results were reported.

Attainment of Objectives for Reading Instruction

A statewide review of evaluation reports indicated that approximately three out of four projects attained their objectives. Projects were considered to have attained their objectives if a majority of the grade levels either met or exceeded their stated objectives. Reading instruction activities that achieved their objectives typically included the following:

- Individualized instructional techniques
- Use of teacher aides, tutors, and volunteers for increasing direct student contact
- Emphasis upon phonics, structural analysis, and comprehension
- Use of standardized achievement tests in combination with diagnostic testing, criterion-referenced measures, questionnaires, and checklists for determining student needs, abilities, and skills

Reading instruction activities not achieving their objectives frequently reported use of the following:

- Group-type instructional techniques
- Commercially developed educational materials
- Less emphasis upon phonics, structural analysis, and comprehension
- Single measures of academic achievement for determining effectiveness

Language Development Through Instruction in English as a Second Language (ESL)

Instruction in English as a second language was designed to assist children from a variety of cultural backgrounds in developing functional communication skills in English in a relatively short period of time. Among the languages primarily spoken by children in school districts were Chinese, French, German, Greek, Gujarati (India), Italian, Japanese, Portuguese, Spanish, Tagalog (Philippines), Urdu (India), and Yugoslavian.

Participation in ESL Instruction

ESL activities sponsored by ESEA, Title I, were reported operational in 455 target schools and served 17,501 students in kindergarten and grades one through twelve. A total of 15,498, or 89 percent, of the children were enrolled in kindergarten and grades one through six, and 2,003, or 11 percent, were enrolled in grades seven through twelve.

Total Title I expenditure for ESL activities amounted to nearly $3.5 million, or approximately 3.5 percent of the state Title I budget for 1971-72. When combined with additional state and local funds, compensatory education expenditures for ESL activities averaged $229 per student (see Table 12).

Objectives and Activities of ESL Instruction

A review of projects containing ESL elements within the language development component disclosed that projects frequently did not contain statements of measurable objectives. Consequently, neither the impact of the activities nor the relative benefit of such teaching programs could be determined. However, when reasonable and measurable objectives were indicated, school district personnel were provided with both a means for assessing student progress and bases for further program decisions.

Teaching methods included individual and group-type instruction with project managers involving ESL specialists, instructional aides, and tutorial assistants directly in the learning process. Teaching materials included both locally developed and available commercial

TABLE 12

Expenditure for Activities in Instruction in English as a Second Language (ESL) in ESEA, Title I, Projects in California, by Funding Source, 1971-72

Funding source	Expenditure	Percent of total
Federal		
ESEA, Title I	$3,482,924	86.7
State		
Miller-Unruh Basic Reading Act	115,200	2.9
Special Teacher Employment Program	25,015	0.6
Local		
District supplementary funds	160,256	4.0
Other	231,079	5.8
Total	$4,014,474	100.0
Expenditure per student	$229	

products; major emphasis was upon linguistic and audiolingual approaches.

Evaluation and Results of ESL Instruction

Student progress was determined by school districts through criterion-referenced measures as well as through checklists and anecdotal records.

The success of ESL instruction was found to be directly related to the precision of program developers in stating project goals and objectives. Analysis of instructional approaches indicated that projects achieving their objectives emphasized use of locally developed instructional materials with individualized instruction, while those not achieving their objectives tended to rely upon available commercial instructional materials in large-group instruction.

Although growth in language proficiency was reported by standardized measures as well as criterion-referenced measures, no relationship was found between successful and unsuccessful programs in terms of either the type or the number of evaluation instruments used.

Summary of the Language Development Component

Analysis of test results indicated that the majority of public and nonpublic school students in Title I projects achieved or surpassed

one month's growth for each month of participation in the Title I reading program. The percent of increase over expected achievement was greater at the elementary grade level than at the high school level.

Analysis of the reading aspect of the language development component revealed that approximately 75 percent of the projects achieved their stated objectives. Successful projects generally reported greater incidence of individualized instructional techniques and use of materials and personnel support generally related to such techniques.

In the absence of appropriate standardized tests for sampling the impact of ESL activities, school districts relied upon locally developed criterion-related measures to determine student gains and language skills. The success of ESL activities was found to be directly related to the precision in which project goals and objectives were stated.

Mathematics Component

The mathematics component was a required instructional component in 1971-72. The purpose of the component was to provide skill development activities in mathematics to low-achieving ESEA, Title I, students by professional staff members with specific training in the use of diagnostic and prescriptive instructional methods.

Participation in the Mathematics Component

A total of 269,997 public school students participated in mathematics instruction activities. Of those children served, 243,249, or 90 percent, were in kindergarten and grades one through six, and 26,748 were in grades seven through twelve (see Table 13).

Title I mathematics instructional programs were reported in 1,736 target public schools and in 285 participating nonpublic schools. During 1971-72 more than 29 percent of all ESEA, Title I, funds in

TABLE 13

Number of Public School Student Participants in ESEA, Title I Mathematics Instruction Activities in California by Grade Level, 1971-72

Grade level	Number of students enrolled	Percent of students
Kindergarten	31,837	11.8
One	38,207	14.2
Two	38,880	14.4
Three	36,865	13.6
Four	35,286	13.1
Five	32,553	12.1
Six	29,621	11.0
Seven	6,243	2.3
Eight	4,956	1.8
Nine	8,949	3.3
Ten	4,119	1.5
Eleven	1,808	0.7
Twelve	673	0.2
Total	269,997	100.0

California were spent to support mathematics programs. The funds were used to provide personnel and material support for more concentrated mathematics instruction than could normally be provided by the school districts. When the Title I funds were combined with state and local monies, they provided for an average per-pupil cost of $127 for mathematics instruction (see Table 14).

Objectives and Activities of the Mathematics Component

More than 88 percent of all ESEA, Title I, projects included measurable objectives for student achievement in mathematics during 1971-72. Objectives were most often stated in terms of months of gain per month of instruction as determined by standardized achievement tests.

Title I mathematics instructional activities included group and individualized instructional techniques which emphasized creative staffing patterns, diagnostic and prescriptive procedures, and a variety of educational materials.

Projects frequently sought to staff professional and paraprofessional personnel in terms of student needs and local resources. Professional personnel included special consultants from business and industry, mathematics consultants from offices of district and county superintendents of schools, and teachers from cooperative grade-level team-teaching efforts at individual school sites. Paraprofessional assistance was rendered by instructional aides working with students under the direct supervision of classroom teachers. In

TABLE 14

Expenditures for Activities in Mathematics in ESEA, Title I Projects in California, by Funding Source, 1971-72

Funding source	Expenditure	Percent of total
Federal		
ESEA, Title I	$28,713,231	83.7
State		
Special Teacher Employment Program	1,968,352	5.7
Local		
District supplementary funds	2,661,479	7.8
Other	949,825	2.8
Total	$34,292,887	100.0
Expenditure per student	$127	

addition to providing services of instructional aides, some districts operated cross-age tutorial programs as well as volunteer programs that included parents and other members of the community.

Diagnostic procedures were used in planning remedial programs for students. Information was generally obtained through group-type standardized or criterion-referenced tests, and detailed information was then recorded on diagnostic profiles for each student. Instructional materials and activities were next prescribed for students, and these activities were implemented by professional and paraprofessional staff members.

Educational materials used by districts were commercially developed and locally constructed motivational and content-oriented packages, usually with criterion-referenced performance tests. The materials included instructional games, learning activity packages, programmed materials, and computer-assisted instruction.

Evaluation of the Mathematics Component

Student gains in mathematics were determined by pretest and post-test comparisons on standardized tests. Projects were viewed in terms of the relationship between their program activities and their accomplishments.

Gains made by students indicated by comparison of pretest and post-test assessments of mathematics skills were computed for children in grades one through twelve in the public schools and for children in grades one through eight in the nonpublic schools. Findings for public and nonpublic schools, by grade level, are shown in tables 15 and 16, respectively.

Results of the Mathematics Component

Comparisons of gain scores by grade levels indicated that the achievement of students in public and nonpublic schools was similar. It was also found that, in the seven months between pretesting and post-testing, Title I students at all grade levels averaged more than one month's growth in mathematics skills for each month of instruction.

Findings revealed that more than 74 percent of the public school students and almost 80 percent of the nonpublic school students achieved moderate (0.7 through 1.4 years) to substantial (1.5 years or more) gains in mathematics during the seven months of instruction between pretesting and post-testing. The percents of student gains are presented in tables 17 and 18.

A comparison of all mathematics achievement data for public school students during the years 1969-70 through 1971-72 is

TABLE 15

Mathematics Achievement by Public School Students Participating in ESEA, Title I, Projects in California, by Grade Level 1971-72

Grade level	Number of students tested	Average grade equivalent scores		Average months of gain between pretest and post-test
		Pretest	Post-test	
One	12,577	1.1	1.8	7
Two	21,670	1.5	2.5	10
Three	29,772	2.2	3.2	10
Four	26,946	3.0	3.9	9
Five	25,176	3.7	4.6	9
Six	23,766	4.4	5.2	8
Seven	4,372	4.8	5.6	8
Eight	3,367	5.4	6.3	9
Nine	5,441	5.9	7.1	12
Ten	1,974	6.2	7.2	10
Eleven	1,048	6.7	7.8	11
Twelve	371	7.2	8.5	13

TABLE 16

Mathematics Achievement by Nonpublic School Pupils Participating in ESEA, Title I, Projects in California, by Grade Level 1971-72

Grade level	Number of pupils tested	Average grade equivalent scores		Average months of gain between pretest and post-test
		Pretest	Post-test	
One	233	1.2	1.9	7
Two	983	1.6	2.5	9
Three	1,105	2.4	3.4	10
Four	964	3.1	4.3	12
Five	898	3.9	5.0	11
Six	712	4.8	5.6	8
Seven	259	5.4	6.3	9
Eight	228	6.2	7.4	12

presented in Table 19. "Incomplete data" represents test information which could not be aggregated with statewide results because of procedural irregularities. This category includes instances in which either the pretest or the post-test information was omitted, test results were not given in grade equivalents, test results were combined among several grade levels, the standardized measure used in the pretest differed from the standardized measure used in the

TABLE 17

Mathematics Achievement Gains by Public School Students Participating in ESEA, Title I, Projects in California, by Grade Level 1971-72

Grade level	Number of students tested	Percent of students tested			
		Substantial gain (1.5+ years)	Moderate gain		Little or no gain (0.6 year or less)
			1.0-1.4 years	0.7-0.9 year	
One	12,577	2.4	24.5	20.3	52.8
Two	21,670	8.8	32.7	34.1	24.4
Three	29,772	13.9	45.5	24.1	16.5
Four.....	26,946	10.5	34.5	38.5	16.5
Five	25,176	6.5	29.4	34.6	29.5
Six	23,766	5.8	28.0	37.7	28.5
Seven	4,372	13.6	16.8	13.9	55.7
Eight	3,367	9.8	13.0	61.0	16.2
Nine	5,441	33.4	34.4	14.0	18.2
Ten	1,974	20.6	12.1	37.1	30.2
Eleven ...	1,048	29.8	12.1	16.4	41.7
Twelve ...	371	54.7	19.7	7.3	18.3
Total or average	156,840	10.2	32.3	31.6	25.9
			63.9		

TABLE 18

Mathematics Achievement Gains by Nonpublic School Pupils Participating in ESEA, Title I, Projects in California, by Grade Level 1971-72

Grade level	Number of pupils tested	Percent of pupils tested			
		Substantial gain (1.5+ years)	Moderate gain		Little or no gain (0.6 year or less)
			1.0-1.4 years	0.7-0.9 year	
One	233	12.9	6.4	12.0	68.7
Two	983	5.3	47.3	26.4	21.0
Three	1,105	7.8	52.3	22.2	17.7
Four.....	964	41.9	24.7	23.4	10.0
Five	898	13.3	44.5	23.4	18.8
Six	712	9.1	29.8	34.6	26.5
Seven	259	8.1	3.9	61.0	27.0
Eight	228	17.5	76.8	0	5.7
Total or average	5,382	15.2	38.9	25.5	20.4
			64.4		

TABLE 19

Mathematics Achievement Gains by Public School Students Participating in ESEA, Title I, Projects in California, 1969-70 Through 1971-72

Level of achievement	Percent of student gains		
	1969-70	1970-71	1971-72
Substantial improvement	5.0	7.2	9.5
Moderate improvement	61.5	58.0	59.9
Little or no improvement	24.6	29.8	24.3
Incomplete data	8.9	5.0	6.3

post-test, nonstandardized tests were used in reporting student progress, or no test results were reported.

Attainment of Objectives for the Mathematics Component

Of the 88 percent of the projects that included measurable performance objectives for the mathematics component, 81 percent achieved their objectives and 19 percent did not. Projects were considered to have attained their objectives if a majority of the grade levels reported either met or exceeded their stated objectives.

Projects achieving their objectives tended to emphasize the following methods and materials:

- Individualized instructional approaches
- Diagnostic and prescriptive procedures and materials
- Personal student contacts with instructional aides, tutors, or volunteers
- Concentrated use of commercially developed, locally constructed motivation- and content-oriented educational materials
- One month's gain in mathematics skill for each month of instruction as their stated program objective
- Multiple assessment techniques in determining student needs, abilities, skills, and attitudes

Projects not achieving their stated objectives more frequently relied upon the following:

- Group instructional approaches
- Less emphasis upon diagnostic and prescriptive methods
- Less exploration with staffing of professional and paraprofessional personnel
- Fewer motivational techniques and augmented instructional materials

- Statements of greater than month-per-month gains
- More frequent reliance upon a single achievement measure to sample program effectiveness

Summary of the Mathematics Component

Standardized test results indicated that more than 74 percent of the public school students and almost 80 percent of the nonpublic school students achieved gains equal to, or more than, one month's growth in mathematics for each month's participation in the Title I program.

Program information revealed that of the 88 percent of the projects that included measurable performance objectives, 81 percent achieved their objectives. Successful projects more frequently reported using individualized methods, diagnostic and prescriptive procedures, motivation- and content-oriented materials, and multiple assessment techniques for determining student needs, abilities, skills, and attitudes.

Auxiliary Services Component

Auxiliary services, defined as those supportive activities necessary to the success of project participants, are pupil personnel services, library services, and health services. Compensatory education programs are required to provide auxiliary services designed to support the basic instructional components. Auxiliary services are made available to student participants in relation to their individual diagnosed needs.

Participation in the Auxiliary Services Component

Project reports showed that pupil personnel services were provided in 453 target schools to 186,629 participants during the 1971-72 school year. Table 20 lists the number of Title I students who received pupil personnel services, as well as the total Title I expenditure per student for each service provided. Library services were provided in 397 target schools to more than 206,400 students. Table 21 lists the number of students who received library services and the expenditures per student. Various health services were provided from Title I funds to 217,290 participants in 466 target schools. Table 22 lists the number of students who received health services and the expenditures for each service provided.

Objectives and Activities of the Auxiliary Services Component

The objectives for auxiliary services were that each participant benefit from appropriate multiple services designed to meet his individual needs and that he be compensated for the conditions that caused him to be identified as educationally disadvantaged.

Specific performance objectives were developed for each of the auxiliary services provided. For pupil personnel services, objectives included changes in pupil behavior related to school adjustment, attitude and self-concept, personal problems, and learning deficiencies. Library services objectives included improved use of library facilities, knowledge of library resources, and attitudes toward books and reading. Objectives for health services included improvements in

TABLE 20

Expenditure Per Student for Pupil Personnel Services in ESEA, Title I Projects in California, 1971-72

Pupil personnel services	Number of target schools	Number of students	Expenditure per student
Individual counseling	279	93,626	$32
Welfare and attendance	146	83,900	4
Parent counseling	224	48,205	8
Home counseling	168	42,045	9
Group counseling	194	38,125	16
Teacher consultation	189	27,912	16
Psychological testing	280	22,587	24
Psychometric assistance	100	12,856	9
Guidance inservice	100	6,421	10
Speech therapy	158	5,746	8
Multiple services	12	5,019	61
Total	1,850	386,442	$16
Unduplicated total	453	186,629	$34

TABLE 21

Expenditure Per Student for Library Services in ESEA, Title I Projects in California, 1971-72

Library services	Number of target schools	Number of students	Expenditure per student
Library materials	155	133,175	$1
Library facilities	169	131,689	3
Library services	134	118,623	1
Library personnel	169	114,942	6
Mobile libraries	23	2,101	4
Multiple services	4	976	87
Total	654	501,506	$3
Unduplicated total	397	206,404	$7

pupil health related to diagnosed medical, dental, nutritional, and family health needs.

Pupil personnel services provided individual counseling, group counseling, parent counseling, psychological testing, welfare and attendance services, home counseling, psychometric assistance, speech therapy, teacher consultation, and guidance inservice training. Library services included library facilities, materials, personnel, and mobile libraries. Health services offered nursing, medical, dental, and

TABLE 22

Expenditure Per Student for Health Services in ESEA, Title I Projects in California, 1971-72

Health services	Number of target schools	Number of students	Expenditure per student
Nursing	306	154,947	$12
Nutritional	166	32,939	5
Medical	133	32,379	2
Health education	114	31,880	1
Dental	146	23,625	4
Diagnostic	123	22,877	2
Family services	104	14,882	3
Multiple services	2	364	110
Total	1,094	313,893	$7
Unduplicated total	466	217,290	$10

nutritional aid, as well as diagnostic services, family assistance, and health education.

Evaluation of the Auxiliary Services Component

Effectiveness of auxiliary services was evaluated by identifying the criteria of a successful program and assessing the level of effectiveness of the specific services provided.

Of the 491 evaluation reports submitted for Title I projects, 58 percent stated criteria in terms of services provided. The remaining 42 percent reported criteria in terms of expected changes in behavior.

The level of effectiveness was determined primarily by three methods: (1) subjective judgment; (2) enumeration of participants or activities; and (3) objective measurement. Analysis of project responses to the question "How was effectiveness determined?" indicated that 54 percent of evaluations were determined by subjective judgment; 33 percent, by enumeration; and 13 percent, by objective measurement.

Of the 1,400 *subjective judgments* reported, 32 percent were based on staff evaluations; 30 percent, on teacher opinions; 20 percent, on inspection of records and reports; 12 percent, on parent responses; and 6 percent, on student comments.

Enumeration consisted primarily of counting the number of participants in auxiliary services. Of the 840 reports submitted that included enumeration data, 76 percent were tabulations of the number of participants or activities provided; only 24 percent related

to the results of services provided. Results most frequently reported were increase in library circulation, decrease in pupil absences, and correction of a greater number of behavior or health problems.

The 341 *objective measurements* reported consisted primarily of locally constructed questionnaires although 36 percent of the projects also used other nonstandardized tests and rating scales. Objective instruments were used most extensively in the evaluation of pupil personnel services: 19 projects reported using pupil attitude scales, behavior inventories, or measures of self-concept; five projects reported library skills tests or library standard ratings; and one project used a specific health test.

Results of the Auxiliary Services Component

Reports of 453 projects rated the level of effectiveness of specific auxiliary services as determined by their evaluations. Ratings of pupil personnel services are tabulated in Table 23. Pupil personnel services were mostly rated as "effective," although 40 percent of the services provided were rated "good." The ratings indicate that the most effective pupil personnel services were psychological testing, speech therapy, individual counseling, and teacher consultation; least effective were guidance inservice training and group counseling.

Reports from 397 projects included ratings of library services as summarized in Table 24. Most library services were generally rated as effective. The most effective library services provided were general services and library facilities; the least effective was mobile libraries.

Evaluation reports of 466 projects rated the effectiveness of specific health services. A summary of these ratings is given in Table 25. The majority of health services were rated as effective. The most effective services were nursing, nutrition, and diagnostic services. In general, the least effective health services were family services and health education.

Summary of the Auxiliary Services Component

Auxiliary services consisted of those supportive pupil personnel, library, and health services necessary to the success of the project participants.

More than 186,000 students benefited from pupil personnel services provided in 453 target schools at an average cost of $34 per student. Nearly 400 schools provided library services for 206,000 students at an average cost of $7 per student. In addition, 466 projects offered health services to 217,000 participants at an average cost of $10 per student.

TABLE 23

Effectiveness of Pupil Personnel Services Provided by 453 ESEA, Title I, Projects in California, 1971-72

Pupil personnel service	Effectiveness ratings										Total ratings	
	Rated as effective		Rated as good		Rated as fair		Rated as poor		Rated as ineffective			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Psychological testing	148	49.0	102	33.8	42	13.9	8	2.6	2	0.7	302	100.0
Individual counseling	137	46.3	123	41.6	30	10.1	4	1.4	2	0.6	296	100.0
Parent counseling	96	37.9	115	45.5	36	14.2	5	2.0	1	0.4	253	100.0
Teacher consultation	97	45.8	97	45.8	14	6.6	3	1.4	1	0.4	212	100.0
Group counseling	76	35.8	93	43.9	36	17.0	5	2.4	2	0.9	212	100.0
Home counseling	83	45.1	68	37.0	29	15.8	3	1.6	1	0.5	184	100.0
Speech therapy	95	54.0	62	35.2	17	9.6	1	0.6	1	0.6	176	100.0
Welfare and attendance	63	37.7	66	39.5	32	19.2	4	2.4	2	1.2	167	100.0
Guidance inservice	48	34.0	60	42.6	28	19.9	3	2.1	2	1.4	141	100.0
Psychometric assistance	52	43.3	45	37.6	18	15.0	4	3.3	1	0.8	120	100.0
Total	895	43.4	831	40.3	282	13.7	40	1.9	15	0.7	2,063	100.0

TABLE 24

Effectiveness of Library Services Provided by 397 ESEA, Title I, Projects in California, 1971-72

Library service	Effectiveness ratings										Total ratings	
	Rated as effective		Rated as good		Rated as fair		Rated as poor		Rated as ineffective			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Library materials	98	43.0	103	45.2	23	10.1	4	1.7	–	–	228	100.0
Library services	101	47.9	77	36.5	31	14.7	2	0.9	–	–	211	100.0
Library facilities	92	49.2	65	34.7	28	15.0	2	1.1	–	–	187	100.0
Mobile libraries	11	42.3	9	34.6	3	11.5	2	7.7	1	3.9	26	100.0
Library personnel	6	60.0	3	30.0	–	–	1	10.0	–	–	10	100.0
Total	308	46.5	257	38.8	85	12.8	11	1.7	1	0.2	662	100.0

TABLE 25

Effectiveness of Health Services Provided by 466 ESEA, Title I, Projects in California, 1971-72

Health service	Effectiveness ratings										Total ratings	
	Rated as effective		Rated as good		Rated as fair		Rated as poor		Rated as ineffective			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Nursing	194	62.0	96	30.7	18	5.7	5	1.6	–	–	313	100.0
Nutrition	111	58.4	55	28.9	19	10.0	3	1.6	2	1.1	190	100.0
Dental	73	46.5	46	29.3	33	21.0	3	1.9	2	1.3	157	100.0
Medical	78	51.0	51	33.3	19	12.4	4	2.6	1	0.7	153	100.0
Diagnostic	82	55.4	43	29.0	18	12.2	4	2.7	1	0.7	148	100.0
Health education	50	40.3	47	37.9	23	18.6	3	2.4	1	0.8	124	100.0
Family services	38	32.7	46	39.7	21	18.1	6	5.2	5	4.3	116	100.0
Total	626	52.1	384	32.0	151	12.6	28	2.3	12	1.0	1,201	100.0

Specific performance objectives were related to the needs of the participants. Major objectives included improvement in pupil behavior, learning, and personal health.

The most effective pupil personnel services were psychological testing, speech therapy, individual counseling, and teacher consultation. Library personnel services and library facilities were the most effective library services. The most effective health services were nursing, nutrition, and diagnostic services.

Parent Involvement Component

The state guidelines for ESEA, Title I, require that parent involvement be part of every compensatory education program. Specific plans for improving communications between the school and the poverty area community, activities designed to make parents aware of the school's instructional program and their children's progress, and assistance to parents in helping their children in the learning process should be included. Under the Title I program, parents were directly involved in the advisory committee's functions and responsibilities.

Participation in the Parent Involvement Component

The districts reported that 174,406 parents and 34,114 school personnel participated in parent involvement activities in 1971-72, a decrease in number of parents of 13 percent from the 1970-71 school year. During 1971-72 Title I funds in the amount of $3,540,683 were spent for parent involvement activities, 16.4 percent less than in the 1970-71 fiscal year. Of the districts with Title I projects, 75 percent used available funds for parent involvement activities. The total expenditures and funding sources are presented in Table 26.

TABLE 26

Expenditures for Parent Involvement in ESEA, Title I Projects in California, by Funding Source 1971-72

Funding source	Expenditures	Percent of total
ESEA, Title I	$3,540,683	94.7
District supplementary funds	63,249	1.7
Other	134,777	3.6
Total	$3,738,709	100.0

Objectives and Activities of the Parent Involvement Component

The major objectives of parent involvement in most projects were related to parent attendance at school meetings and parent-teacher conferences, positive attitudes toward the school, and active membership on parent advisory committees. Few objectives stressed the parents' acquisition of knowledge or understanding, classroom visitations, or helping children at home.

Specific objectives reported most frequently by 400 projects included such criteria as 70 percent attendance at parent meetings, 75 percent positive feelings about the program, and 60 percent participation in school functions. Approximately 28 percent of the objectives reported were stated in unmeasurable terms and referred vaguely to such goals as involvement, participation, communication, or awareness.

The most infrequent parent involvement objectives (reported by fewer than 1 percent of the projects) were parent participation as resource persons or contributors to project planning and evaluation.

Parent involvement activities were designed primarily to increase the opportunities for contacts between the parents and the school. The ten specific activities most important in attaining the component objectives were reported as follows, in order of frequency: parent conferences, home visits, school meetings, parent advisory committee meetings, workshops and classes, use of parents as volunteers or aides, social activities for parents, planning activities, classroom visitations, and open-house programs.

The only major objective for which few specific activities were designed was the attainment of positive parent attitudes toward the school. Presumably all of the activities listed would contribute toward attainment of this objective.

There was a significant positive correlation between the rank order of activities stated most frequently in measurable objectives and their importance as reported in project evaluations. The only major discrepancies were in two activities—home visits and home tutoring. Visits to the home ranked high in importance yet ranked low in occurrence in stated objectives. Activities to assist parents to help their children at home ranked low in importance but high in frequency of occurrence in objectives.

Evaluation of the Parent Involvement Component

Effectiveness of the parent involvement component was evaluated primarily by the number of parents participating in the activities provided. Analysis of a sample of 300 evaluation reports showed that

effectiveness was measured approximately 54 percent by enumeration of participants and activities; 24 percent by objective instruments; and 22 percent by subjective judgment.

Of the reports with *enumeration* data, 81 percent were tabulations of the number of parents participating in activities. Data most frequently reported were attendance figures, number of conferences attended, and number of home visits made.

The *objective measurements* consisted largely of parent questionnaires although some of the projects also relied upon minutes of meetings. Less than 6 percent of the projects used rating scales, attitude scales, or any other kind of measuring instrument.

Of the *subjective judgments* reported, 29 percent were based on parent comments; 27 percent, on staff evaluations; 15 percent, on teacher opinions; and 11 percent, on records and reports. In addition, 16 percent of the judgments included responses of aides or parent advisory committees.

Results of the Parent Involvement Component

Of 416 projects reporting results of parent involvement, 41 percent achieved their objectives, 14 percent attained part of their objectives, 14 percent reported negative results, and 31 percent reported results not related to their stated objectives.

When results were compared with stated objectives, there was a significant relation between the statement of measurable objectives and results obtained. Few projects with vague objectives reported positive results; more such projects reported irrelevant results.

A summary of the positive results of parent involvement most frequently reported is given in Table 27. This table includes only the specific outcomes indicated by the 228 projects reporting positive results.

There was a significant positive correlation between the reported importance of specific activities and the results obtained. The greatest discrepancies between importance and results were in four activities—home calls, social activities, parent contacts, and attendance at school programs. Home calls and social activities rated relatively high in performance but ranked relatively low in frequency of positive results. Parent contacts and attendance at school programs, in contrast, rated low in importance but ranked high in results.

Summary of the Parent Involvement Component

Parent involvement was designed to improve communications between school and community. Although more than 208,000

TABLE 27

Positive Results of Parent Involvement Most Frequently Reported in Relation to Stated Objectives in 228 ESEA, Title I Projects in California, 1971-72

Rank order	Specific results reported	Projects reporting	
		Number	Percent
1	More positive parent attitudes	69	30.3
2	Increased attendance at parent conferences	61	26.8
3	Increased attendance at school meetings	56	24.6
4	Improved attendance at advisory meetings	47	20.6
5	Increased parent knowledge or understanding	39	17.1
6	Increase in aide or volunteer time	38	16.7
7	Increased attendance at school programs	33	14.5
8	Attendance at workshops or classes	27	11.8
9	More involvement in planning activities	25	11.0
10	Greater number of contacts made by school	17	7.5
11	More classroom visits by parents	16	7.0
12	Increased number of home calls made	13	5.7
13	Increase in communications with home	12	5.3
14	Greater amount of help given student at home	7	3.1
15	Increased attendance at social activities	6	2.6
16	Improvement in pupil performance	3	1.3
17	More activities provided by school	2	0.9
18	Improved attendance at PTA meetings	1	0.4

parents and school personnel participated in parent involvement activities during 1971-72, there was a decrease in the number of parents participating and in Title I expenditures as compared to 1970-71.

The major objectives were related to improving attendance at school meetings and parent conferences, attitudes towards the school, and membership on parent advisory committees. Little emphasis was placed on the parents' acquisition of knowledge or understanding, classroom visitations, or helping children at home.

In achievement of stated objectives, 41 percent of the projects reported positive results; 14 percent attained part of their objectives; and 14 percent did not attain their objectives. Results not related to objectives were reported by 31 percent of the projects. Those projects with vague objectives tended to show irrelevant or negative results.

Results of parent involvement most frequently reported by successful projects included the following:

- More positive parent attitudes
- Increased attendance at parent conferences, school meetings, and advisory committee meetings

- Increased parent knowledge and understanding
- Increase in aide or volunteer time

The activities considered most important were generally those projects that produced the most positive results.

Intergroup Relations Component

The intergroup relations component comprises those activities designed primarily to alleviate racial, social, or linguistic isolation. Intergroup relations programs foster interaction between groups of children from differing racial, cultural, and socioeconomic backgrounds. Intergroup relations include, but are not limited to, desegregation, human relations, ethnic studies, and student exchanges.

Participants in the Intergroup Relations Component

A total of 367,661 students, parents, school personnel, and others participated in intergroup relations activities during 1971-72, including non-Title I students involved in exchange programs. Of the districts receiving Title I funds, 75 percent reported intergroup relations activities—an increase of 5 percent over 1970-71.

School districts spent $2,552,799 in Title I funds for intergroup relations during 1971-72, 11 percent less than the $2,867,489 spent in 1970-71. The sources and amounts of funds spent for intergroup relations are given in Table 28.

TABLE 28

Expenditures for Activities in Intergroup Relations in ESEA, Title I Projects in California, by Funding Source, 1971-72

Funding source	Expenditures	Percent of total
ESEA, Title I	$2,552,799	79.3
District supplementary funds	316,382	9.8
Other	351,384	10.9
Total	$3,220,565	100.0

Objectives and Activities of the Intergroup Relations Component

The major intergroup relations objectives reported by 418 projects were related to such outcomes as greater understanding and acceptance of different groups, knowledge of ethnic group contribu-

tions, interaction between groups, and more positive attitudes. Approximately 63 percent of the projects reported measurable performance objectives, while 37 percent indicated vague goals or aims.

Of the specific objectives listed, 35 percent referred to such desirable goals as intergroup acceptance, increased interaction, and greater appreciation of group differences. About 29 percent of the objectives related to the acquisition of knowledge—ethnic facts, group characteristics, cultural heritage, and the contributions of different groups to society. Specific groups mentioned most frequently were Mexican-American, American Indian, black, and Oriental. Another 17 percent specified changes in behavior, such as more positive attitudes or improved self-image. Approximately 10 percent of the objectives were stated in terms of participation in ethnic studies, cultural programs, or other school activities. Less than 10 percent related to providing experiences or multiethnic materials.

Intergroup relations activities focused on opportunities designed to attain the component objectives.

The ten most significant intergroup activities included, in order of importance, school activities, cultural programs, use of multiethnic materials, ethnic studies, exchange programs, academic instruction, group discussions, inservice workshops, social activities, and parent meetings.

There was a high correlation between the frequency of activities included in objectives and their importance as rated by project personnel. However, two activities—school activities and academic instruction—rated high in importance but appeared infrequently in stated objectives.

Evaluation of the Intergroup Relations Component

Reports submitted by the 263 projects with measurable performance objectives listed over 600 evaluation instruments or methods used to determine the effectiveness of intergroup relations. Of these, 38 percent were based on subjective judgment; 34 percent, on objective measurement; and 28 percent, on enumeration or counting procedures.

The *subjective judgments* were based primarily on teacher opinions but also on informal observations, records, staff evaluation, and group discussions. Only one project reported a parent advisory committee survey in its evaluation.

Objective measurements included tests of intergroup knowledge, questionnaires, attitude inventories, and rating scales. Over 40 percent of the objective evaluations were based upon locally

constructed measures of ethnic, racial, and cultural information. However, one-third of the projects that mentioned such an instrument in their stated objectives failed to use any objective measurements at all. Although 86 project objectives included increased friendship and interaction between groups, only six projects used sociograms to evaluate results. Likewise, of the 59 districts listing positive attitudes in their objectives, only 27 used any kind of attitude measure in their evaluation.

Counting, or *enumeration*, was not predominant in evaluating intergroup relations. When such procedures were used, they consisted primarily of counting the number of participants in activities and the use of multiethnic materials. Less than 3 percent of the projects reported on the reduced incidence of conflicts or encounters as an index of intergroup relations.

Results of the Intergroup Relations Component

Of the projects reporting measurable objectives, 38 percent achieved their objectives, 9 percent attained part of their objectives, 36 percent did not achieve their objectives, and 17 percent reported results not related to their objectives.

Positive results reported in relation to stated objectives are summarized in Table 29, based upon the data submitted by projects with measurable performance objectives.

That intergroup relations activities were effective was evident in the resulting increase in interaction between groups, participation in activities, positive pupil attitudes, and knowledge of cultural history and heritage. Also noted were improvement in pupil self-image, closer parent relationships, and greater use of multiethnic study materials. Very few schools reported improvement in self-confidence or academic achievement as a result of the intergroup relations activities.

Summary of the Intergroup Relations Component

The intergroup relations component was designed primarily to reduce isolation between different racial, social, cultural, or ethnic groups.

During 1971-72 more than 360,000 participants – students, parents, school personnel, and others – shared in intergroup activities. While the number of participants was greater than in 1970-71, total expenditures decreased.

The major objectives of intergroup relations activities were directed toward achieving greater understanding and acceptance, increasing knowledge and interaction, and developing more positive attitudes.

TABLE 29

Positive Results of Activities in Intergroup Relations Most Frequently Reported in Relation to Stated Objectives in 125 ESEA, Title I Projects in California, 1971-72

Rank order	Specific results reported	Projects reporting	
		Number	Percent
1	Increased interaction between groups	39	31.2
2	Greater participation in activities	31	24.8
3	More positive pupil attitudes	30	24.0
4	Increased knowledge of intergroup contributions	23	18.4
5	More knowledge of cultural and ethnic facts	20	16.0
6	Improved pupil self-image	19	15.2
7	More knowledge of cultural heritage	18	14.4
8	Increased knowledge of ethnic characteristics	17	13.6
9	Closer parent relationships	16	12.8
10	Greater use of multiethnic materials	15	12.0
11	Increased intergroup acceptance	13	10.4
12	Better community relations	11	8.8
13	More positive teacher attitudes	9	7.2
14	More friends chosen from other groups	8	6.4
15	Improved school attendance	7	5.6
16	Fewer intergroup conflicts	6	4.8
17	Increase in pupil self-confidence	5	4.0
18	Greater exposure to cultural information	4	3.2
19	More activities provided	3	2.4
20	Improved pupil achievement	2	1.6

The most important activities included cultural programs, use of multiethnic materials, ethnic studies, exchange programs, and academic instruction. Other activities included group discussions, staff inservice workshops, social events, and parent meetings.

Reports indicated that about half of the projects attained all or part of their stated objectives and that about one-third of the projects did not; the remaining projects reported irrelevant results.

Positive measurable results frequently included greater group interaction, more participation, improved attitudes, and an increase in knowledge of cultural heritage. Other results reported were improved pupil self-image, closer parent relationships, and increased use of multiethnic materials.

Staff Development Component

School districts operating compensatory education programs in California are required to develop inservice training for all personnel who are involved with Title I students. The purpose of the staff development component is to provide continuing inservice activities to help improve the compensatory education program at the school level.

Participation in the Staff Development Component

The greatest emphasis in the staff development component in 1971-72 was on inservice training for instructional staff members who worked directly with students. The number and type of personnel who participated in the staff development activities are presented in Table 30.

Staff participation at the elementary level was greatest in language development activities. At the secondary level, staff participation was greatest in intergroup relations activities.

More than $4 million was spent for staff development activities from several categorical aid sources. Of this amount, $3,789,270, or 87 percent, was Title I funds. The cost per participant amounted to $113, $98 derived from Title I funds and $15 derived from other funding sources. The amounts spent from each funding source are presented in Table 31.

The number of activities, by component, are given in Table 32 as well as the number of participants, the approximate cost per activity, and the cost per participant.

Objectives and Activities of the Staff Development Component

Objectives of the staff development component were related to improving teaching skills in instructional areas, changing staff attitudes, and increasing knowledge of learning processes. One major objective was the implementation of individualized instruction in the classroom to improve each pupil's opportunities for learning.

Staff development activities were designed primarily to provide a continuing inservice education program to staff members. Activities

TABLE 30

Number and Type of Personnel Participating in Staff Development Activities in 501 ESEA, Title I, Projects in California 1971-72

Type of personnel	Number participating	Percent of total
Public school personnel		
Classroom teachers	17,579	46.5
Instructional aides or assistants	9,199	24.3
Volunteers	2,207	5.8
Reading specialists	1,846	4.9
Directors, coordinators, or resource personnel	1,339	3.5
Community aides	1,087	2.9
Mathematics specialists	794	2.1
Clerks or custodians	636	1.7
ESL specialists	462	1.2
Counselors	389	1.0
Nurses	357	0.9
Psychologists or psychometrists	261	0.7
Librarians	255	0.7
Evaluators	146	0.4
Social workers or attendance counselors	106	0.3
Other personnel	1,167	3.1
Total	37,830	100.0
Nonpublic school personnel		
Classroom teachers	525	55.3
Instructional aides or assistants	189	19.9
Other personnel	235	24.8
Total	949	100.0

were developed by school districts, generally in response to locally designed needs assessment surveys.

This component emphasized instruction in reading and mathematics techniques, diagnostic and prescriptive teaching methods and materials, and the use of instructional equipment. Approaches used were demonstrations, formal lectures, and informal workshops related to language development, mathematics, parent involvement, intergroup relations, and auxiliary services.

Most frequent activities conducted were those related to language development and mathematics. Relatively few activities were concerned with auxiliary services or intergroup relations.

Evaluation of the Staff Development Component

Effectiveness of the staff development component was evaluated most often by informal means. Approximately 56 percent of the

TABLE 31

Expenditures for Activities in Staff Development in 427 ESEA, Title I Projects in California, by Funding Source, 1971-72

Funding source	Expenditure	Percent of total
Federal		
ESEA, Title I	$3,789,270	86.9
State		
Miller-Unruh Basic Reading Act	88,775	2.0
Special Teacher Employment Programs	21,600	0.5
Local		
District supplementary funds	137,358	3.2
Other	321,584	7.4
Total	$4,358,587	100.0

TABLE 32

Activities, Participants, and Relative Costs of Staff Development in 457 ESEA, Title I, Projects in California, 1971-72

Component	Number of activities	Number of participants	Approximate cost per activity	Approximate cost per participant
Language development	8,179	24,040	$197	$67
Mathematics	5,455	20,602	193	51
Auxiliary services	3,070	9,783	128	40
Intergroup relations	3,147	17,546	123	22
Parent involvement	4,134	18,068	83	19

evaluations reported by 400 projects were based upon subjective judgments, 33 percent included objective measurements, and 11 percent consisted of enumeration or counting.

Subjective techniques used most frequently were staff judgments, staff surveys, teacher opinions, and observations. Measures of teacher attitude and the opinions of aides or pupils were used less frequently.

Objective measurements most often included questionnaires, rating scales, and locally constructed tests. Attitude scales were seldom used. Only 15 projects reported the achievement of objectives as a measure of component effectiveness.

Enumeration methods consisted primarily of counting the number of participants. Very few projects considered the number of activities

a measure of component effectiveness. School attendance figures were used by 12 projects as an evaluation measure.

Evaluation measures did not vary greatly according to specific component activity areas. The effectiveness of language development, mathematics, auxiliary services, and intergroup relations activities was usually determined by staff judgment and questionnaires. Parent involvement activities were evaluated by the number of parents participating.

Results of the Staff Development Component

Staff development activities during 1971-72 resulted in improvements in language and mathematics instruction, better use of auxiliary services, more parent involvement, and better intergroup relations. Reports of 483 projects showed that activities in all staff development areas were given average ratings of "good," as shown in Table 33. The most effective activities were in language development and mathematics; the least effective were in intergroup relations and parent involvement.

The most cost-effective staff development activities—those which were rated as most effective at the least cost per participant—were activities related to parent involvement and intergroup relations. Least cost-effective were language development and auxiliary services activities.

Summary of the Staff Development Component

School districts provided continuing inservice activities for all Title I personnel during 1971-72 to improve the compensatory education programs at the school level. The greatest emphasis was on training personnel who worked directly with students.

More than 38,000 public and nonpublic school personnel participated in staff development activities at a cost of over $4 million, 87 percent of which came from Title I funds. Most of the participants were classroom teachers and instructional aides.

Staff development objectives emphasized improvement of instruction, changes in staff attitudes, and increased knowledge of learning processes. A major objective was the implementation of more individualized diagnostic and prescriptive teaching in the classroom.

Activities developed were generally related to local needs. Activities featured demonstrations, lectures, and informal workshops on instruction or the supportive program components. Most frequent activities were in language development and mathematics; fewer activities were concerned with auxiliary services or intergroup relations.

TABLE 33

Effectiveness of Staff Development Activities Provided by 483 ESEA, Title I, Projects in California, 1971-72

Staff development activity	Effectiveness ratings										Total ratings	
	Rated as effective		Rated as good		Rated as fair		Rated as poor		Rated as ineffective			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Language development	251	52.0	193	40.0	36	7.4	2	0.4	1	0.2	483	100.0
Mathematics	212	45.5	179	38.4	60	12.9	12	2.6	3	0.6	466	100.0
Auxiliary services	130	33.9	177	46.2	64	16.7	9	2.3	3	0.9	383	100.0
Parent involvement	131	30.7	183	43.0	97	22.8	11	2.6	4	0.9	426	100.0
Intergroup relations	124	30.0	167	40.4	103	25.0	16	3.9	3	0.7	413	100.0
Total	848	39.1	899	41.4	360	16.6	50	2.3	14	0.6	2,171	100.0

Effectiveness was evaluated primarily through informal methods, mostly by subjective opinions. About one-third of the projects used objective measurements; about one-ninth counted the number of participants. Specific evaluation methods reported most frequently included staff judgments, questionnaires, opinion surveys, rating scales, and teacher comments. Relatively few evaluations were based upon attitude scales, school attendance figures, or opinions of aides.

Staff development activities resulted in improvements in language and mathematics instruction, more effective auxiliary services, greater parent involvement, and better intergroup relations. The most effective activities reported were in the instructional components; the least effective were in intergroup relations and parent involvement.

Cooperative Projects

All Title I projects with entitlements of less than $25,000 were required to join with other smaller projects within the same areas to provide comprehensive educational programs. Through such cooperative planning, children in the smaller programs were provided with a greater variety of services and materials than would have been possible in separate projects functioning independently. Such planning also made possible a reduction in overall administrative costs as well as a reduction in teacher-pupil ratios and related class workloads.

Participation in Cooperative Projects

During 1971-72, 84 cooperative projects were organized to serve 741 public and nonpublic elementary and high schools in 560 districts throughout the state. The total Title I funding for the cooperative projects was approximately $10,718,000, which represented 11 percent of the Title I funds in California. When Title I funds were combined with state and local monies, they provided for an average per-pupil cost of $422. The sources and amounts of funds available to cooperative projects are presented in Table 34.

During 1971-72 the cooperative projects served 29,405 children enrolled in preschool through grade twelve, over 98 percent of them in public schools. Table 35 indicates the number of children, by grade level, who participated in cooperative projects.

The implementation of cooperative projects required the hiring of additional staff members for both teaching and nonteaching positions. Teachers and specialists were hired for preschool through the high school level. The nonteaching personnel included teacher aides, librarians, nurses, community liaison personnel, and counselors. Table 36 shows the number of positions supported by Title I funds in cooperative projects during 1971-72.

During the 1971-72 school year, Title I projects sought to improve the performance level of qualified children by concentrating on language development and mathematics, stressing special assistance through individualized instruction. This was accomplished through

in-class assistance augmented by instructional aides and through regularly scheduled periods away from the classroom under the direction of teaching specialists.

TABLE 34

Expenditures for Cooperative Projects Activities in ESEA, Title I Projects in California, by Funding Source, 1971-72

Funding source	Expenditure	Percent of total
Federal		
ESEA, Title I	$10,717,789	86.3
State		
Miller-Unruh Basic Reading Act	515,894	4.2
Special Teacher Employment Program	12,643	0.1
Local		
District supplementary funds	868,376	7.0
Other	305,920	2.4
Total	$12,420,622	100.0
Expenditure per student	$422	

TABLE 35

Number of Students Participating in ESEA, Title I, Cooperative Projects in California, by Grade Level, 1971-72

Grade level	Number of students enrolled			Percent of students	
	Public schools	Nonpublic schools	Total	Public schools	Nonpublic schools
Preschool	221	0	221	100.0	0
Kindergarten	2,210	0	2,210	100.0	0
One	4,061	41	4,102	99.0	0.9
Two	4,444	84	4,528	98.1	1.9
Three	4,385	86	4,471	98.1	1.9
Four	3,930	82	4,012	98.0	2.0
Five	3,216	86	3,302	97.4	2.6
Six	2,462	62	2,524	97.5	2.5
Seven	672	25	697	96.4	3.6
Eight	431	8	439	98.2	1.8
Nine	1,371	8	1,379	99.4	0.6
Ten	815	10	825	98.8	1.2
Eleven	396	1	397	99.7	0.3
Twelve	248	4	252	98.4	1.6
Ungraded	42	4	46	91.3	8.7
Total	28,904	501	29,405	98.3	1.7

TABLE 36

Number of Positions Supported by ESEA, Title I, Funds in Cooperative Projects in California, 1971-72

Position	Number of positions, by time employed		
	Full-time	Half-time or more	Less than half-time
Teaching			
Preschool	3	6	1
Kindergarten	4	0	9
Elementary	98	49	95
Secondary	12	15	18
Reading specialist	169	82	45
ESL specialist	19	11	0
Mathematics specialist	34	62	33
Subtotal	339	225	201
Nonteaching			
Instructional teacher aide	444	665	344
Community aide	14	15	26
Librarian	4	4	12
Director	10	11	27
Supervisor/coordinator	3	5	40
Counselor	5	6	16
Psychologist	1	4	19
Psychometrist	3	0	1
Evaluator	0	0	18
Social worker	1	1	0
Attendance counselor	1	0	1
Nurse	4	5	34
Clerk/secretary	14	19	34
Adult tutors	4	8	14
Student tutors	0	5	69
Volunteers	7	65	617
Other	35	12	75
Subtotal	550	825	1,347
Total	889	1,050	1,548

Through diagnostic procedures and assessment of needs, teachers were able to prescribe for specific instructional needs.

Evaluation and Results of Cooperative Projects

Student progress was evaluated through pretest and post-test comparisons of standardized achievement tests. The cooperative projects relied heavily upon California's mandated testing programs in grades one, two, three, and six, with complementary measures in kindergarten and grades four and five as well as in high school grades.

Average months of gain in reading skill per month of instruction were computed for children in grades one through twelve by using standardized measures on a pretest and post-test schedule. Because of the number of students in nonpublic schools served by cooperative projects, students in public and nonpublic projects were combined. Test results indicated that reading achievement gains for public school students in cooperative projects closely paralleled results obtained in the larger projects throughout the state. The findings are presented in Table 37.

Findings also revealed that more than 80 percent of the public school students participating in cooperative projects achieved moderate (0.7 to 1.4 years) to substantial (1.5 years and more) growth in reading during the seven months of instruction between pretesting and post-testing. Reading achievement gains, by percent, are presented in Table 38.

Standardized achievement tests were also administered on a pretest and post-test basis to determine gains in mathematics skills by students in grades one through twelve participating in cooperative projects. Results indicated that mathematics gain score patterns by grade level for the cooperative projects were similar to those demonstrated in the larger districts statewide. Mathematics achievement findings are shown in Table 39.

Analysis of student gains in mathematics revealed that, as in the projects in the larger districts, more than 80 percent of public school students in the cooperative projects achieved moderate (0.7 to 1.4 years) to substantial (1.5 years and more) gains in mathematics during the seven months of instruction between pretesting and post-testing. Mathematics achievement gains, by percent, are presented in Table 40.

Auxiliary Services

One of the four supportive components required by each project was auxiliary services. This component extended health services, pupil personnel services, and library services to all Title I cooperative participants.

Health services were provided by additional personnel funded by Title I, or the services were included in the program by the offices of district or county superintendents. Such services were primarily provided by one or more nurses, nurses aides, or volunteers. Children were tested for vision and hearing, and attention was given to specific health and dental problems. In most cases the nurse served as the liaison between the home, school, and other agencies within the community. Conferences on corrective measures were conducted

TABLE 37

Average Reading Achievement by Public School Students Participating in ESEA, Title I, Cooperative Projects in California by Grade Level, 1971-72

Grade level	Number of students tested	Average grade equivalent scores		Average months of gain between pretest and post-test
		Pretest	Post-test	
One	1,916	1.1	1.9	8
Two	3,302	1.4	2.4	10
Three	3,352	1.9	3.0	11
Four	3,120	2.6	3.6	10
Five	2,506	3.3	4.3	10
Six	1,952	3.9	4.9	10
Seven	468	4.6	5.9	13
Eight	277	5.1	6.4	13
Nine	810	5.5	6.9	14
Ten	473	6.4	7.4	10
Eleven	246	6.3	7.8	15
Twelve	145	6.4	7.5	11

TABLE 38

Reading Achievement Gains by Public School Students Participating in ESEA, Title I, Cooperative Projects in California by Grade Level, 1971-72

Grade level	Number of students tested	Percent of students tested			
		Substantial gain (1.5+ years)	Moderate gain		Little or no gain (0.6 year or less)
			1.0-1.4 years	0.7-0.9 years	
One	1,916	2.5	25.2	40.5	31.8
Two	3,302	10.2	37.7	35.2	16.9
Three	3,352	8.8	52.0	21.0	18.2
Four	3,120	7.9	47.8	21.3	23.0
Five	2,506	10.1	31.6	39.1	19.2
Six	1,952	10.4	48.6	30.3	10.7
Seven	468	40.0	31.0	17.7	11.3
Eight	277	43.3	26.0	27.8	2.9
Nine	810	30.4	44.3	12.1	13.2
Ten	473	22.4	11.4	30.9	35.3
Eleven	246	37.4	29.3	13.8	19.5
Twelve	145	21.4	41.4	1.4	35.8
Total or average	18,567	11.7	40.2	28.6	19.5
			68.8		

TABLE 39

Average Mathematics Achievement by Public School Students Participating in ESEA, Title I, Cooperative Projects in California by Grade Level, 1971-72

Grade level	Number of students tested	Average grade equivalent scores		Average months of gain between pretest and post-test
		Pretest	Post-test	
One	1,900	1.1	1.9	8
Two	3,009	1.6	2.5	9
Three	3,134	2.2	3.2	10
Four	2,963	2.9	3.9	10
Five	2,379	3.6	4.6	10
Six	1,855	4.3	5.2	9
Seven	393	4.9	6.1	12
Eight	198	5.3	6.1	8
Nine	748	6.1	7.4	13
Ten	341	6.3	7.2	9
Eleven	138	6.0	7.0	10
Twelve	91	6.3	7.7	14

TABLE 40

Mathematics Achievement Gains by Public School Students Participating in ESEA, Title I, Cooperative Projects in California by Grade Level, 1971-72

Grade level	Number of students tested	Percent of students tested			
		Substantial gain (1.5+ years)	Moderate gain		Little or no gain (0.6 year or less)
			1.0-1.4 years	0.7-0.9 years	
One	1,900	2.0	33.4	26.2	38.4
Two	3,009	12.6	18.9	42.7	25.8
Three	3,134	17.1	48.7	25.7	8.5
Four	2,963	5.6	53.8	25.4	15.2
Five	2,379	6.3	49.4	31.2	13.1
Six	1,855	6.5	35.5	36.7	21.3
Seven	393	37.2	31.6	12.2	19.0
Eight	198	6.1	31.3	27.3	35.3
Nine	748	38.5	31.8	16.3	13.4
Ten	341	8.5	35.5	17.0	39.0
Eleven	138	34.8	29.0	0	36.2
Twelve	91	60.4	1.1	0	38.5
Total or average	17,149	11.5	39.3	29.4	19.8
			68.7		

with parents, and follow-up programs were outlined. When possible, other programs were provided by the schools. Workshops for Title I staff offered instruction to teachers to assist them in identifying health problems. Nurses reported improved health for children when the corrective measures could be taken.

Pupil personnel services were provided on an individual and group basis for elementary and high school students. Conferences were scheduled according to student needs and counselor workload. Counselors frequently served several schools and assisted educational programs by interpreting test results; analyzing learning and behavioral problems; providing student, teacher, and parent counseling; interpreting programs; and providing assistance for pupil testing. Workshops were organized by guidance personnel to assist staff members with behavioral modification techniques and to establish performance objectives.

Library services were implemented in the majority of projects in varying degrees. A few projects included scheduled periods in the library for specific help with librarians or aides as an integral part of the program. In other projects, libraries served as a central source of materials for classroom information and study.

Parent Involvement

The parent involvement component was designed to inform parents of school instructional programs, to provide information on the child's progress, and to encourage the parent's active participation in the program and in the child's school experiences in other ways. Activities included school visitations, assistance in the classroom, organized meetings to assist non-English-speaking parents, and parent-teacher conferences.

Intergroup Relations

The intergroup relations component sought to provide cultural, social, and ethnic experiences that were aimed at building a better understanding of minority groups in the community. Specific objectives of the intergroup relations component included presenting information on the contributions of other ethnic groups, promoting better understanding between staff members and parents, alleviating school and racial isolation, increasing group contacts through recreation and instructional activities, and strengthening learning activities for community groups through meetings and workshops.

Staff Development

The staff development component provided teachers in the cooperative projects with opportunities to participate in workshops,

conferences, visitations, and college extension programs. Curriculum needs typically included individualized instructional methods in reading and mathematics, with emphasis on diagnostic and prescriptive techniques.

Projects for Neglected and Delinquent Youths in Local Institutions

Local institutions and state agencies administering projects for neglected and delinquent youths received $1,111,897 in Title I funds. The projects served 7,307 participating youths; the average expenditure was $152 per child. The projects were administered by 57 local and state agencies. The number of administrative agencies and the unduplicated count of the children served in special projects are shown in Table 41.

TABLE 41

Number of Administrative Agencies and Children Participating in ESEA Title I, Projects for Neglected and Delinquent Youths in California, 1971-72

	Number
Administering agencies	
Participating school districts	36
Participating offices of county superintendents of schools	21
Total	57
Children enrolled	
Programs for neglected children	2,126
Programs for delinquent children	5,181
Total	7,307

Objectives and Activities of Projects for Neglected and Delinquent Youths

The two main objectives of these projects were to improve the attitudes of neglected and delinquent children toward themselves and toward education and to improve academic achievement in basic skills areas. Specific objectives stated in projects for neglected children included the development of positive attitudes, increased self-image and higher aspirational goals, a higher level of verbal

functioning, and improved study habits designed to raise achievement levels in reading, mathematics, and basic business skills. Objectives indicated in projects for the delinquent emphasized self-discipline, social and interpersonal adjustment, and the use of motivational techniques for promoting achievement in reading and mathematics.

Activities used in achieving project objectives related to the personal and social concerns of neglected and delinquent children included staff meetings focusing on student adjustment, individual conferences with students by professional counselors, use of behavior modification techniques, and music, sports, and field trip experiences. Methods most frequently reported in promoting academic interest included individualized instruction by special teachers, aides, tutors, and volunteers, as well as the use of programmed materials. Performance contracts with students and remediational programs were other methods. A number of tutorial programs were set up, which incorporated regularly scheduled after-school as well as in-school individualized student contacts.

Reports on inservice training programs for professional and paraprofessional staff members were supplied by 87 percent of all participating school agencies. Although some inservice efforts were locally organized and conducted, others were a part of larger district or county programs. The topics addressed by training programs included program planning, curriculum development, the use of instructional media, counseling of youths and families, and evaluation. The personnel most frequently involved in planning and conducting professional development activities were district and county superintendents of schools staff, project directors, psychologists, probation officers, and medical doctors.

Results of Projects for Neglected and Delinquent Youths

Projects varied in length of participation from periods of less than a month to many months. Evaluation indicated, however, that achievement gains and positive attitude and behavior changes were greater for children remaining more than six months. It was found that about five months was the median number of months for the institutionalized child. Of all the youths, about 6 percent received instruction for 1 month or less; 21 percent, for 1 to 3 months; 32 percent, for 3 to 6 months; 30 percent, for 6 to 12 months; and 11 percent, for 12 to 18 months.

Both standardized tests and locally developed measures were used for evaluating projects. The impact of language and mathematics components was determined by standardized instruments unless the

period of instruction was too short to obtain valid testing results. For measuring attitude and behavior changes in the students, projects developed and implemented a variety of locally constructed instruments addressed to specific student needs and interests.

Standardized test data in reading and mathematics indicated that the rate of achievement ranged from no gain (in a few cases) to more than three months' growth for each month in the program. However, it was found that more than 80 percent of the project students achieved the goal of month-per-month gains or greater. Some children were able to achieve grade level in reading and mathematics for the first time.

Reading average achievement gains were about 1.2 months for each month in school for those receiving instructions for six months or less. For the students remaining in school for six months or longer, the average rate of gain was about 1.5 months for each month of instruction.

For youths receiving instruction in mathematics for six months or less, the rate of gain was 1.1 months for each month in school. For those enrolled in the program six months or longer, the rate was 1.3 months of gain for each month of instruction.

The most frequently used locally devised instruments evaluating progress of neglected and delinquent youths in the program included teacher-made tests, surveys, teacher/student questionnaires, student attitude check sheets, and anecdotal records. Data from the subjective evaluative instruments enabled agencies to determine positive and negative changes occurring during the months in which the children were institutionalized. Some of the most frequently mentioned positive changes recorded follow:

- Greater cooperation and understanding between students and public institutions
- Increased rapport and communication between staff and students
- Increased attendance in class
- Improved work habits and self-discipline
- Greater achievement
- Reduced rate of recidivism

Summary of Projects for Neglected and Delinquent Youths

A review of evaluation reports submitted by administering agencies throughout the state indicated the following project accomplishments:

- More than 80 percent of the students enrolled in projects for neglected and delinquent youths achieved or exceeded one

month's gain in reading and mathematics for each month of participation in the program.

- As a result of ESEA, Title I, activities, administering agencies reported increased cooperation and understanding between students and the public institutions.
- Projects indicated enhanced personal and social adjustment as well as a reduction in the rate of recidivism among participating students.

California Plan for the Education of Migrant Children

The California Plan for the Education of Migrant Children provides supplementary educational services to children of migrant agricultural workers in California. This project is administered and operated by the Division of Compensatory Education, Bureau of Community Services and Migrant Education, State Department of Education, with the cooperation of 34 county superintendents of schools and 224 school districts. Funding is provided under ESEA, Title I.

Participants in the California Plan for the Education of Migrant Children

The California Plan for the Education of Migrant Children was initiated in the spring and summer of 1967 and has been revised and refunded each year since. In 1967 approximately 9,000 children were provided services by the California Plan for the Education of Migrant Children. This number has increased each year as funding has increased. In 1971-72 a total of 42,330 children received services. During the regular school term, 36,831 children were served; 10,999 children received services in summer schools.

Objectives and Activities of the California Plan for the Education of Migrant Children

The thrust of the California Plan for the Education of Migrant Children is toward meeting the most pressing educational needs of migrant children with supplementary instructional and other supplementary services, coordinated with comprehensive programs of services supported by all available funding sources.

The California Plan for the Education of Migrant Children included the following objectives for 1971-72:

- Migrant children would evidence a mean of at least one month's progress in school subject matter for each month of attendance in participating schools. Supplementary instructional programs would be provided to aid in attaining this rate of gain.

- Migrant children would maintain an attendance rate equivalent to resident children through regular school district efforts supplemented by child welfare and family-related programs provided under the California Plan.
- Migrant children's health would be such that their education would not be impaired. Coordination and cooperation by local resources supplemented by health services provided through the California Plan would help implement this objective.
- Migrant children's needs would be met through the special skills of professionals and nonprofessionals trained in preservice and inservice programs provided through a variety of resources, coordinated through the California Plan.
- Migrant children would be provided continuity of educational services through interstate cooperation relating to transfer of students' records as well as frequent communication and sharing of materials and program ideas by professionals from the various states.

Services for the benefit of migrant children were provided by regional components that were implemented in six multicounty regions in areas with the largest numbers of agricultural migrants. Supplementary educational services were provided to migrant children attending schools in the region. Multiregional components provided services to migrant children in several regions. Statewide and interstate activities were implemented to assure continuity and coordination of educational services.

Activities and services included the following:

- Instructional activities that emphasized improvement in language, including oral and written language and reading, and in mathematics
- Health and welfare services, including medical and dental health services, nutritional services, health education, and welfare services necessary to improve school attendance and facility for learning
- Preservice and inservice education of professional and paraprofessional personnel to improve their skills in working with migrant children
- Supportive services, including providing transportation for children on study trips and to clinics and other medical and dental facilities, supplying community and family liaison services, and conducting recreation programs

Multiregional components included the California Migrant Teacher Assistant Mini-Corps–220 bilingual college students who intended to

become teachers. These college students were trained and employed as teacher assistants in school districts where migrant education programs were being implemented.

A comprehensive program of preschool education and day care was operated in 25 publicly operated migrant family housing centers supported by a combination of funding sources. Services were provided for at least 12 hours per day, six or seven days per week, for the approximately six months of the year that the centers were kept open. As an extension of the child care activity, a pilot program of group infant care was maintained in three of the centers.

Evaluation and Results of the California Plan for the Education of Migrant Children

In each of the six regional components of the California Plan for the Education of Migrant Children, standardized achievement tests in reading and mathematics were administered to all migrant children in grades two through twelve who were enrolled in the instructional program in participating schools early in the program year. Those children remaining in the program at the end of 120 teaching days (six school months) were given the same test as a post-test.

Objective Data

Reports for the six regional components provided a variety of statistics on the achievement of children.

Academic Gains in Reading and Mathematics. A sample of 2,365 children who took both reading tests achieved an average gain of six months during the six-month period as measured by the tests. The 2,560 children for whom mathematics scores were available achieved an average of five and a half months' gain in mathematics scores.

Health Services. Statistics from the six regional components show that 23,057 migrant children were provided medical services, and 16,645 children were given dental care during the school year. Another 3,423 children were the recipients of medical and dental services in summer programs. This represents an increase over the previous year.

Nutrition. Free lunches, snacks, and in some instances breakfasts were provided to 5,144 migrant children during the school year. Another 6,309 children received these services during the summer. These numbers represent only the children who were provided these services from migrant education funds. Many more children were served through regular school lunch programs.

Family Liaison. Contacts with migrant families continued to improve relations between migrant parents and the schools. Children

are remaining in school for longer periods and attending fewer schools. Their attendance is notably more regular, often surpassing the attendance rates of resident children.

Subjective Data

A variety of instruments was used to collect subjective data concerning various aspects of the program. These instruments included questionnaires, anecdotal records, rating scales, diaries, and interview records. Information was obtained on such factors as teacher attitudes toward migrant children, workshop effectiveness, teacher estimates of pupil growth, effectiveness of paraprofessional personnel, and suitability of materials and methods employed in the program.

Attainment of Objectives for the California Plan for the Education of Migrant Children

Services that were provided for migrant children during 1971-72 were not markedly different from those provided during the previous year. More children were served directly by personnel employed by the regional offices. Teaching teams (a classroom teacher assisted by a resource teacher and aides) were used in individualizing instruction for migrant children in the class. Approximately the same number of children were served as in the previous year, but more were served during the school year, and fewer were enrolled in summer schools.

Summary of the California Plan for the Education of Migrant Children

The California Plan for the Education of Migrant Children has encountered three main problems:

1. *Child Labor.* Agriculture is the only major industry which continues to utilize large numbers of children in the work force. During the summer months—the peak harvest season in California—thousands of young children work in the harvesting of a wide variety of crops. These children, many of whom are migrants, are not free to take advantage of educational programs which could be provided for them. This problem has no easy solution since economic, social, and political considerations are involved.

2. *Migrant Health.* The physical and mental health of migrant children is a continuing problem. It is unreasonable to expect that children who are debilitated by disease or malnutrition, are suffering from carious teeth, have impaired eyesight or hearing, or have severe psychological problems can progress academically at a rate comparable to those in vigorous health. A large number of migrant children

have some referable physical health problem that may impair their ability to learn. Adequate treatment of these children is beyond the present capability of health agencies. Thus, part of funds primarily intended for educational programs must be used to provide health services to make the children fully educable.

3. *Funding.* Inadequate funding is a continuing problem. Although some progress has been made, the amount of funds provided is still inadequate to meet any but the most pressing educational needs of some of the migrant children in California. Programs have necessarily been limited to activities designed to meet the highest priority needs of migrant children in areas of highest concentration of migrants and to peak impaction periods. Thus, many eligible children receive somewhat limited services for only a part of the year, and others cannot be served at all.

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